

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-13. (Cancelled)

14. (New) An information recording/reproducing apparatus for recording and reproducing video information, wherein said video information is adapted to an information processing data format that is defined to include (1) video packs of which data is configured by a sequence header containing first aspect ratio information and compressed video data, each of the video packs having a packet header, (2) audio packs of which data is audio information, (3) unit control information packs as managing information including second aspect ratio information, (4) a video object unit including a unit control information pack at the head and including the video packs and audio packs continuing to the unit control information pack, (5) and a video object including the video object unit, the apparatus comprising:

an encoder including a video encoder, an audio encoder and a formatter and configured to assemble the video packs, the audio packs and the video object unit; and

a controller including a sequence header processing section and an aspect ratio information processing section, and configured to coordinate content of the aspect ratio information in the video object unit, by detecting a third aspect ratio information from the input source, changing the content of the second aspect ratio information in a unit control information pack to the corresponding content with the detected third aspect ratio information, and changing the content of first aspect ratio information in the sequence header in the video packs belonging to the video object unit.

15. (New) An apparatus according to claim 14, further comprising:
video object management means for managing the video object, which includes a plurality of video object units;

majority determining means for determining which aspect ratio information, 4:3 or 16:9, appears more often in a plurality of unit control information, when the video object management means prepares object management information; and

a second controller configured to set the aspect ratio information in the object management information such that the aspect ratio information agrees to a determination result obtained by the second controller.

16. (New) An information recording/reproducing method for recording and reproducing video information, wherein the video information is adapted to an information processing data format that is defined to include (1) video packs of which data is configured by a sequence header containing first aspect ratio information and compressed video data, each of the video packs having a packet header, (2) audio packs of which data is audio information, (3) unit control information packs as managing information including second aspect ratio information, (4) a video object unit including a unit control information pack at the head and including the video packs and audio packs continuing to the unit control information pack, (5) and a video object including the video object unit, the method comprising:

generating the video pack from an input source;
generating the audio pack from the input source;
generating the video object unit from the input source;
detecting third aspect ratio information from the input source when the video object unit is formed, and replacing the second aspect ratio information included in the unit control information pack with the detected third aspect ratio information; and

changing contents of the first aspect ratio information of all video packs that are contained in the video object unit having the second aspect ratio information in the head thereof such that the contents are changed to contents related to the third aspect ratio information.

17. (New) An information recording/reproducing method for recording and reproducing video information, wherein the video information is adapted to an information processing data format that is defined to include (1) video packs of which data is configured by a sequence header containing first aspect ratio information and compressed video data, each of the video packs having a packet header, (2) audio packs of which data is audio information, (3) unit control information packs as managing information including second aspect ratio information, (4) a video object unit including a unit control information pack at

the head and including the video packs and audio packs continuing to the unit control information pack, (5) and a video object including the video object unit,

in a recording mode, the method comprising:

detecting third aspect ratio information from the input source when the video data of the input source is compressed to generate the video pack and the video object unit, and changing the content of the second aspect ratio information in the unit control information pack to the corresponding content with the detected third aspect ratio information;

changing the content of first aspect ratio information in the sequence header in the video packs belonging to the video object unit having the second aspect ratio information in the header to contents related to the third aspect ratio information; and

recording the video object unit in the recording medium,

in a reproducing mode, the method comprising:

referring only to the aspect ratio information contained in the sequence header, and setting the aspect ratio of an encoder output of video data contained in the video object unit, to which the sequence header belongs.